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PS Ref. No.: IBMK10194

REMARKS

This is intended as a full and complete response to the Office Action dated April 6, 2006, having a shortened statutory period for response set to expire on July 6, 2006. Please reconsider the claims pending in the application for reasons discussed below.

Claims 1-3, 5-7, 9-12, 14-15, 17-23, 25-26 and 28-29 are pending in the application. These claims remain pending following entry of this response.

Double Patenting

Claims 1-3, 5-7, 9-12, 14-15, 17-23, 25-26 and 28-29 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10/037,595. Applicants acknowledge the double patenting rejection made in the Office Action mailed April 6, 2006, and respectfully request that the rejection be held in abeyance because (i) no claim in the present application is currently allowable and (ii) the application on which the rejection is made (No. 10/037,595) has not issued. Because it is possible that no claims will issue, or that the claims of the present application will be amended in such a way to overcome the Examiner's concerns regarding double patenting, Applicants defer responding until the present rejection ripens into an actual double patenting rejection.

Claim Rejections - 35 U.S.C. § 103

Claims 1-7, 9-11, 14-15, 17-18, 20-22, 25, 26, and 28-29 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. Pub. 2003/0217184 (*Nair*) in view of U.S. No. 6,055,576 (*Beighe*) and further in view of U.S. No. 6,822,966 (*Putcha*).

Applicants respectfully traverse this rejection.

The Examiner bears the initial burden of establishing a *prima facie* case of obviousness. See MPEP § 2142. To establish a *prima facie* case of obviousness three

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basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one ordinary skill in the art, to modify the reference or to combine the reference teachings. Second, there must be a reasonable expectation of success. Third, the prior art reference (or references when combined) must teach or suggest all the claim limitations. See MPEP § 2143. The present rejection fails to establish at least the third criteria.

Specifically, *Nair* does not disclose a method of processing messages that includes the step of receiving, at a socket configured for a server application executing on a computer, data from a remote source via a network connection prior to allocating a buffer to contain the data, as recited by claim 1. Independent claims 9 and 20 recite a similar limitation. Rather, *Nair* is directed to a method for processing data frames up (and down) a communications protocol stack. When a data frame (a sequence of electromagnetic impulses transmitted over a physical communication link) is received by a network communication device, *Nair* describes that a "buffer manager 114 maintains a pool of available buffers from which a protocol module may select or be allocated a buffer for temporary storage of the frame of data." *Nair*, ¶ 25. In contrast, the present claims recite receiving, at a socket configured for a server application executing on a computer, data from a remote source via a network connection (*See e.g.*, claim 1).

Respectfully, the techniques disclosed in *Nair* of passing a pointer to different software modules of a protocol stack fails to disclose anything about operations performed once the server application receives a "data from a remote source via a network connection." In fact, *Nair* expressly indicates that the shared buffer used by the protocol stack may be discarded (or returned to the buffer pool) once a frame is provided to a server application. Specifically, *Nair* provides:

"[P]rocessing of the data frame continues up the protocol stack until processing of the data frame by the machine is competed. At such time, the data is read from the buffer at 230 and, for example, provided to an application software program. At this point, for example, the buffer is no longer needed for temporarily storing the data pockets while the

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various protocol software modules in the protocol stack process the data frame."

Nair, ¶ 28. As the highlighted passage demonstrates, the usage of a common buffer disclosed by Nair is unrelated to a method for a server application to acquire a buffer to store data received over a socket. In fact, Nair discloses that once the data frame is provided to the server application "the buffer [used by the network protocol software modules] is no longer needed." Clearly, the operations performed by the server application are distinct from those used to manage a buffer within different layers of the protocol stack. Unlike the system disclosed by Nair, where the "buffer is no longer needed" by the protocol stack, the present claims recite, obtaining the buffer according to the buffer mode parameter, wherein the obtained buffer sized exactly to the size of the data received from the remote source; and allocating the obtained buffer to contain the data. These steps occur <u>after</u> (from the perspective of the system disclosed by Nair) "the buffer is no longer needed." Therefore, Nair in view of Beighe and Putcha fails to disclose this limitation of the present claims, as recited by claims 1, 9, and 20.

Thus, Applicants submit that the Examiner's reliance on *Nair* is fundamentally misplaced, whether in an initial rejection as a 35 U.S.C. § 102 reference, in a subsequent rejection combining *Nair* in view of *Beighe*, or in the current rejection by combining *Nair*, *Beighe*, and *Putcha*. Respectfully, simply adding additional references does not alter this basic distinction between the methods disclosed by *Nair* (in view of *Beighe* and *Putcha*) and the present claims.

Additionally, the Examiner states "Nair does not specifically state using a network based socket receiving data and then allocating a buffer to contain the data." Office Action dated April, 6, 2006, p. 3. Nevertheless, the Examiner asserts that Beighe:

teaches that TCP is a well known protocol that implements networked based sockets in order to allow a server application to communication with a client application (col. 2, lines 46-62) as well as a socket receiving data and then stored in a buffer. In analogous art, *Beighe* teaches receiving data at a socket and then allocating the buffer (col. 3, lines 42-55).

Office Action dated April, 6, 2006, p. 4. First, the proposed modification fundamentally alters the operation of Nair. Specifically, Nair discloses maintaining a pre-existing pool

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of buffers for use by a plurality of modules of a protocol stack; the sole purpose of the "buffer manager' disclosed by Nair is to maintain this pool. Accordingly, as the proposed modification fundamentally alters the operation of Nair, the rejection is improper. See, MPEP § 2143.01 (V and VI).

Second, the cited passages from Beighe are directed to the actions of a cable modem in passing data packets up or down the layers of a network communication protocol stack running on the cable modem. Much like the discussion in Nair of a pointer passed between layers of a protocol stack, Beighe is directed to techniques for the cable modem to pass data frames through a protocol stack and to a method for "accepting or rejecting a data packet which is being transferred between a client and a server over a cable and a cable communication network." Beighe, Abstract. In other words, like Nair, Beighe is directed to techniques for data processing within a protocol stack. At most, Beighe discloses that "the data is packetized and stored in a buffer controlled by application 30." Beighe 3:46-49. Applicants submit the general observation made in Beighe - that an application may store data in a buffer - fails to disclose the recited limitation of a buffer mode parameter that indicates a buffer acquisition method for acquiring a buffer, as recited by claims 1, 9 and 20.

The Examiner appears to agree, as the current office action provides: "Nair in view of Beighe do not [sic] specifically disclose determining a buffer acquisition mode according to a buffer mode parameter with a receive operation call." Office Action dated April, 6, 2006, p. 4. In an attempt to substantiate the rejection, the Examiner turns to Puchta, and asserts:

Putcha discloses another method of processing messages which teaches a buffer mode parameter which indicates a buffer acquisition method for acquiring a buffer (col. 4, lines 18-33).

Office Action dated April, 6, 2006, p. 4. In fact, however, Putcha, like Nair and Beighe, is directed to "a network communication device for directing data units over a communication network." Putcha, 4:18-22. The material recited by the Examiner describes how a "network communication device" configured according to the teaching

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of *Putcha* may use a "buffer allocator" to allocate "buffer units" between different "buffer sub-pools." In other words, *Putcha* describes modifying the size of different buffers based on the dynamic requirements of a network communication device. However, what *Putcha* does not disclose a method for a server application to process methods that includes determining a mode to obtain the buffer according to a buffer mode parameter supplied with a receive operation call, wherein the buffer mode parameter indicates a buffer acquisition method for acquiring a buffer to contain the data received from a remote source via the network connection, as recited by claim 1.

Accordingly, for all the foregoing reasons, Applicants submit that claims 1, 9, and 20 are patentable over *Nair* in view of *Beighe* and *Putcha*. Further, dependant claims 2-7, 10-11, 14-15, 17-18, 21-22, 25, 26, and 28-29 each depend from one of independent claims 1, 12, or 20, and are thus believed to be allowable for the reasons provided above. Therefore, Applicants respectfully request that the rejection of these claims be withdrawn.

Claims 12 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nair* in view of *Beighe* in view of Glasser et al. (USPN 5,764,890) (hereinafter Glasser).

First, on its face the rejection is defective. Claim 12 depends from claim 9 and claim 23 depends from claim 20, thus these claims include all of the limitations of claim 9 and 20, respectively. The Examiner concedes that *Nair* in view of *Beighe* does not disclose all the limitations recited by independent claim 9 and 20. Thus, when the Examiner asserts "Referring to claim 12, *Nair* in view of *Beighe* discloses the invention substantively as described in claim 9;" presumably, the Examiner still believes that "*Nair* in view of *Beighe* do not [sic] specifically disclose determining a buffer acquisition mode according to a buffer mode parameter with a receive operation call." *Office Action* dated April, 6, 2006, p. 4. Nevertheless, Applicants believe that the above discussion regarding claims 9 and 20 demonstrate that these claims are patentable over *Nair* in view of *Beighe* and *Putcha*. Thus, Applicants believe a detailed discussion of the

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Glasser reference cited in regards to dependent claims 12 and 23 is unnecessary. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claim 19 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Nair in view of Beighe in view of Fry et al. (USPN 4,467,411) (hereinafter Fry).

Like the rejction of claims 12 and 23, the rejection is defective on its face. Claim 19 depends from claim 9, and thus includes all of the limitations recited by claim 9. The Examiner concedes that Nair in view of Beighe does not disclose all the limitations of independent claim 9. Thus, when the examiner asserts "Referring to claim 19, Nair in view of Beighe discloses the invention substantively as decribed in claim 9;" presumably, the Examiner still believes that "Nair in view of Beighe do not [sic] specifically disclose determining a buffer acquisition mode according to a buffer mode parameter with a receive operation call." Office Action dated April, 6, 2006, p. 4. Nevertheless, Applicants believe that the above discussion regarding claims 1, 9, and 20 demonstrate that these claims are patentable over Nair in view of Beighe and Puchta. Thus, Applicants believe a detailed discussion of the Fry reference cited in regards to dependent claim 19 is unnecessary. Accordingly, Applicants respectfully request that this rejection be withdrawn.

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Conclusion

Having addressed all issues set out in the office action, Applicants respectfully submit that the claims are in condition for allowance and respectfully request that the claims be allowed.

If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact Gero McClellan, attorney of record, at (336) 643-3065, to discuss strategies for moving prosecution forward toward allowance.

> Respectfully submitted, and S-signed pursuant to 37 CFR 1.4,

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